Oregon Department of ENERGY

Small Scale Local Energy Program Advisory Committee

SELP Strategic Review Progress

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June 28, 2018
SELP Strategic Review

- Select State Energy Initiatives
- SELP Operations, Background, and Legislative History
- Program Performance and Review Findings
- Recommendations
- Next Steps
Review Activities to Date

• 2016 third-party review of SELP credit administration
  • Review included engagement with SELPAC members

• Department staff review of loan portfolio, historical credit recommendations, and SELPAC meeting minutes
  • Focus on loans that failed to perform

• Completion of the program’s 2017 Biennial Report to the Oregon Legislature

• Individual meetings with program stakeholders
Public Utility Commission (ORS 757.612) and the Northwest Power and Conservation Council’s Power Plan

- Achieve all cost-effective energy conservation.

Renewable Portfolio Standard (ORS Chapter 469A)

- Increase percentage of renewable sources in retail electricity sales.
Climate Change (ORS Chapter 468A)
  • Statewide goals to reduce greenhouse gas emissions.

Executive Order No. 17-20, Accelerating Efficiency in Oregon’s Built Environment to Reduce Greenhouse Gas Emissions and Address Climate Change
  • Increase energy efficiency in new construction and existing buildings.
Executive Order 17-21, Accelerating Zero Emission Vehicle Adoption in Oregon to Reduce Greenhouse Gas Emissions and Address Climate Change

- 50,000 new registered and operating electric vehicles by 2020.
SELP Operations

- Program established in 1980 by a legislatively-referred constitutional amendment adding Article XI-J to the Oregon Constitution. Program authority and administrative responsibilities codified under ORS Chapter 470.

- Operates as an enterprise fund using two funds to carry out program activities:

  1. **Small Scale Local Energy Project Loan Fund**: Holds proceeds from Article XI-J bond sales and is the funding source for program loans.

  2. **Small Scale Local Energy Project Administration and Bond Sinking Fund**: Consists of all program fees and interest earned, loan receivables, monies transferred from the Small Scale Local Energy Project Loan Fund, and any gifts, grants, or legislative appropriations.
SELP Operations

• SELP issues taxable and tax-exempt state general obligation bonds to raise capital for new loan origination.

• Bond issuance is facilitated by the State Treasurer through the Debt Management Division and typically requires at least $5 million in approved loans.

• Smaller loan amounts were historically funded out of program reserves.

• Program bond debt is repaid through loan revenue and program fees.

• Net-interest margin is critical – SELP has never been capitalized.
SELP Operations

- SELP loan activity is supported by the Small-Scale Local Energy Project Advisory Committee (SELPAC).
  - Nine-member committee, appointed by the ODOE Director, representing the interests of Oregon citizens.

- SELPAC reviews loan applications and standards and criteria for SELP projects proposed under rule, and makes recommendations to the ODOE Director on loan applications.

- ODOE SELP staff process loan applications, conduct loan underwriting, and develop a financing recommendation prior to convening SELPAC for its review and recommendation.

- ODOE Director makes final decision on all loans.
Definition of small scale local energy project.
Establishes Small Scale Local Energy Project Advisory Committee (SELPAC).
Establishes various operating standards and processes related to loan approval and bond issuance.
Establishes various conditions and limitations on bond refunding.
Defines program applicant eligibility.
Establishes the Small Scale Local Energy Project Administration and Bond Sinking Fund.
Establishes program rulemaking authority with State Department of Energy.
Program Authority Under Oregon Administrative Rules

- Program rules related to loan limits, loan security, and loan conditions are codified under OAR 330-110-004.
- Program procedures and administrative issues not defined under statute.
• **1979** – Program established legislatively to provide financing for projects that use renewable resources to provide electricity, heat, or substitute fuels.

• **1981** – First loan is made. Tribal organizations are added as eligible borrowers.

• **1983** – Energy conservation is added as an eligible project type.

• **1985** – Adds state agencies as eligible applicants.
• **1993** – Adds alternative fuel projects and recycling projects to list of eligible projects.

• **1997** – Adds federal agency and public corporation created by the state to list of eligible applicants.

• **1997** – Project eligibility expanded to include ancillary improvements to existing eligible projects, with additional broadening of project eligibility occurring in 1999, 2005, and 2011.
• **2005** – Expands project eligibility to include projects that are “primarily” located in Oregon or providing substantial benefits to Oregon.

• **2007** – Cascade Grain Products loan originated.

• **2008** – Peak Sun Materials Corporation loan originated.

• **2008** – ReVolt Technology LLC loan originated.

• **2008** – Program cash flow deficit recognized.
• **2015** – Treasury suspends SELP bond sales.

• **2017** – ODOE refinances portions of SELP bond debt, reducing the cash flow deficit by $3 million.
SELP Performance (1981-Current)

- **Commercial Loans:** 545
  - $260 Million — 42% of total

- **Public Loans:** 357
  - $352 Million — 58% of total

- **Total Loans:** 902
  - $612 Million

**Loan Losses**
- $33.6 Million
- 5.5% loss
$111 million in financing to support irrigation districts

$150 million in financing to support state universities

$23.4 million in financing to support K-12 public schools

- Mean loan amount $986K
- 62 loans over $1 million
- $835,000 in loan losses
- <1% loan loss

Total Portfolio $612 Million
# SELP Public Loans $1M or Greater

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Number</th>
<th>Loan Amount (millions)</th>
<th>Percent of Total</th>
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</thead>
<tbody>
<tr>
<td>Hydroelectric</td>
<td>13</td>
<td>$107.1</td>
<td>35%</td>
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<tr>
<td>Co-generation</td>
<td>3</td>
<td>$34.7</td>
<td>11%</td>
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<tr>
<td>Transmission</td>
<td>1</td>
<td>$1.0</td>
<td>&lt;1%</td>
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<tr>
<td>Conservation</td>
<td>43</td>
<td>$154.7</td>
<td>51%</td>
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<tr>
<td>Municipal Wastewater</td>
<td>2</td>
<td>$2.0</td>
<td>2%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>62</strong></td>
<td><strong>$305 Million</strong></td>
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</table>
Selp Loans Grew Larger Over Time

1980-2006 – 37 loans for $157.7 million, mean size $4.2M

2007-2015 – 25 loans for $147.3 million, mean size $5.8M

- $835,000 in loan losses
- <1% loan loss
Over $46 million in financing to support conservation

Over $50 million in financing to co-generation and waste heat recapture

Over $39 million in financing to support renewable generation

- Mean loan size $477K
- 39 loans over $1 million
- $32.8 million in loan losses
- 12.6% loan loss
## Commercial Loans over $1M

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Number</th>
<th>Loan Amounts (Millions)</th>
<th>Percent of Total</th>
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<tbody>
<tr>
<td>Multiple Type</td>
<td>2</td>
<td>$4.3</td>
<td>2%</td>
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<tr>
<td>Waste Heat</td>
<td>5</td>
<td>$26.0</td>
<td>13%</td>
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<tr>
<td>Co-generation</td>
<td>3</td>
<td>$32.0</td>
<td>16%</td>
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<tr>
<td>Conservation</td>
<td>11</td>
<td>$42.0</td>
<td>21%</td>
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<tr>
<td>Technology Demonstration</td>
<td>4</td>
<td>$25.5</td>
<td>13%</td>
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<tr>
<td>Renewable Generation</td>
<td>9</td>
<td>$36.8</td>
<td>19%</td>
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<tr>
<td>Alt-Fuel</td>
<td>3</td>
<td>$27.2</td>
<td>14%</td>
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<tr>
<td>Recycling</td>
<td>2</td>
<td>$1.6</td>
<td>1%</td>
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<tr>
<td><strong>Total</strong></td>
<td>39</td>
<td><strong>$195.4 Million</strong></td>
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</table>
Large Loans are Increasingly Common

1980-2006 – 22 loans for $103 million, mean loan size $4.6M

2007-2012 – 17 loans for $92 million, mean loan size $5.4M

- $32.2 million in loan losses
- 16% loan loss
Loan Losses over $1M

Commercial Loan Loss Limited to a Few Loans

Cascade Grain Products (2007) - $18.08 million loss

Peak Sun Materials Corporation (2008) - $10.19 million loss

ReVolt Technologies (2010) - $1.98 million loss

These losses represent 90% of all loan loss to date and 92% of all commercial loan losses.
Findings

Portfolio Performance

- SELP has had sustained success lending to public borrowers:
  - >$350 million in funding
  - <1% loan loss

- Program success with commercial loan occurred prior to 2007 and with smaller loans:
  - 90% of commercial loan losses between 2007 - 2010
  - 1% loan loss on commercial loans under $1 million.
Findings

Risk Management

• SELP is not risk tolerant as loan loss has a magnifying effect on program cash flow impairment:
  • Ex. Cascade Grain was a $20 million loan but the debt service requirements on the bond were close to $30 million.
  • Peak Sun was advanced $12.2 million and the bond debt service was $17 million.
  • Revolt was advanced $2 million and the bond debt service was $2.8 million.

• Once cash reserves are depleted, it can be very challenging to reverse program losses.

• Significant cash reserves are needed to mitigate loan risk.

• Program’s interest rate margin were not consistently tied to the risk of the loan.
Program rules and guidelines should have better reflected the complexity and scope of projects being funded.

Credit underwriting rules and guidelines should have been written to:

- Ensure the underwriting process considered historical borrower cash flow as the primary repayment source.
- Limit reliance on cash flow projections for determining repayment capacity.
- Limit the use of policy exceptions and director discretion during loan underwriting and approval.
- Establish separate collateral advance rates for real property, equipment, and personal property.
Findings

SELPAC

• SELP would have benefited from SELPAC board members receiving training in credit risk management:
  • SELPAC is responsible under statute for developing independent credit recommendations on multimillion dollar loans and for reviewing standards and criteria for small scale local energy projects in rule.
  • This is an enormous responsibility for a volunteer board.

• SELP would have benefited from adding additional ex-officio expertise to the SELPAC board.

• Any additional board input?
Findings

Program Continuity

- Attracting and retaining high quality staff is vital to program success.

- Uncertainty about the future of SELP and instability within the agency likely contributed to staff turnover which challenged the department’s ability to generate new loans, manage the fiscal aspects of the program, provide accurate and timely reporting to stakeholders, and recruit quality replacement personnel.
Findings

Bond Financing

• Bond funding is not an appropriate means of raising loan capital for many projects.

• The use of bonds as a funding source introduces borrower project risk:
  • Bond sales require at least $5 million in approved loans.
  • Loan pricing is often unknown until after a borrower has been obligated to repay a debt.
  • Bond funded loans limit a borrower’s ability to prepay.
Findings

The Commercial Market

• SELP occupies a different space in the commercial credit market compared to the early years of the program.

• More commercial lenders are extending credit on energy projects.

• The difference between commercial lending rates and SELP loan rates has contracted over time.
  • Rates and Loan Volume excel
Preliminary Recommendations

• SELP should focus on public borrowers:
  • Makes best use of existing funding system
  • Limited program liquidity to consider commercial project risk
  • Established history with public projects and existing borrower relationships
  • LC 458 – Energy Lending Programs

• If the LC moves forward, ODOE should engage peer organizations and stakeholders in a discussion about potentially reentering private sector energy project financing under a stand-alone program:
  • This discussion should involve collaboration with stakeholders and peer organizations
  • Any policy option development should recognize financing risks in the commercial projects and should support existing state energy initiatives
Next Steps

• Incorporation of any additional analysis and program considerations into review:
  • Now

• Outreach for LC 458 – Energy Lending Programs:
  • Now, building toward 2019 legislative session

• Delivery of final written strategic review:
  • Fall, 2018

• 2019 Legislative Session:
  • Feb – July, 2019

• Future commercial financing program discussions:
  • Post 2019 legislative session